



Editorial

'Oncoplastic Breast Surgery': Does It Deserve A Separate Specialty?

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Breast conservation surgery and its overview:

Breast conservation treatment is defined as the excision of the primary breast tumour and adjacent breast tissue (breast-conserving surgery), usually followed by irradiation. Breast-conserving surgery (BCS) also is commonly referred to as lumpectomy, partial mastectomy, and segmental mastectomy. After a BCS procedure, a fear prevails among the surgeons, oncologists and of course among the patients about local recurrence. The results of large datasets and also from meta-analysis of prospective randomized trials comparing conservative surgery and radiation therapy with mastectomy has demonstrated no survival differences¹. Local recurrence was reported in 6.2 percent of the mastectomy patients and in 5.9 percent of the patients treated with breast conservation². Though the disease affects mostly the older women, the affected population comprises many young women who expect the treatment to result in long-term survival with good aesthetic and psychological outcomes. In the last 2/3 decades BCS followed by postoperative radiotherapy replaced the radical and modified-radical procedures of Halsted, Patey and Dyson as the standard of care for early-stage BC³.

General Principles of Oncoplastic Surgery

The term "oncoplasty" is derived from the Greek words "onco" (tumor) and "plastic" (to mold). It incorporates tumour resection, which ensures oncological safety, with plastic surgery, which ensures

the best cosmetic outcome. According to its original definition, oncoplastic breast surgery (OBS) focuses on favourable scar orientation/placement, significant soft tissue rearrangement, and reconstruction of the contralateral breast to achieve symmetry. As stated in the Milanese Consensus Conference on Breast Conservation of 2006, the aim of OBS is to achieve wide excision and clear margins without compromising on the cosmetic outcomes. The principles of oncoplastic procedures evolved in Europe in mid 1990s by Dr. Audretsch, a German surgeon, introduced the term "oncoplastic surgery" (OPS). It quickly spreaded through France, Italy, and the UK, where it quickly gained popularity, the rate of procedures performed increased from 40% in 1991 to 60% in 2002. OBS has also become popular in the USA and other countries worldwide³.

Outcome after Oncoplastic surgery

The aesthetic outcome of BCT is unsatisfactory in 30% of patients, while the cosmetic failure rate of OBS is 0-18%. Moreover, when BCT is implemented with the OBS technique, the failure rate drops to < 7% at 2 years. Losken et al a giant in the field of oncoplastic surgery reported that the aesthetic results were good at 1 year (97.7%) and at 5 years (90.3%) in a series of 540 consecutive cases of patients with high tumor/breast volume ratios^{3,4}. Given the wider excision margin with OBS, the local control and oncological safety of OBS should be better than that of BCT. Based on reports in the literature, in OBS,

the tumour size is usually larger (2.7 vs. 1.2 cm) and the specimen weight is four times higher than that with BCT. Accordingly, the tumour-positive margin rate is significantly lower after OBS (12% vs. 21%) and the re-excision is less in comparison to BCT (4 vs 14.6%),OBS allows wider resections even upto 50% of the breast volume without causing deformity³. Considering local recurrence and satisfaction outcome of asthesis was more favourable in OBS than BCT⁵.

Concepts about Oncoplastic Breast Surgeon

Pioneer OPS surgeons brought the idea that this surgery is a philosophical one: to combine concepts of two different surgical specialties with seemingly opposite goals. Traditionally, plastic surgery and surgical oncology were two separate and non-interchangeable surgical specialties. Plastic surgery techniques would be less aggressive, optimizing the aesthetic outcome and thus compromising the oncological radicality of the surgery, potentially leading to increased recurrences and decreased survival. It is clear, when analyzing the progress of these two specialties in breast cancer surgery, that they have followed divergent pathways over the last 20 years. While in plastic surgery the techniques have become even more sophisticated and complex, culminating in microsurgical flaps, in surgical oncology and breast surgery the techniques have become more individualized and less invasive. This divergence of thoughts arrived at a possible point of convergence between the two specialties with the emerging concept of OPS in the 1990s, where both specialties slowly began to advance in a concert⁶.

Education and Training

Finally, it is a common belief that all breast surgery today should conceptually be 'oncoplastic surgery', where oncological principles and aesthetic considerations are both taken into account to obtain the optimal oncological and aesthetic outcome. This requires a new training paradigm for the next generation of breast and plastic surgeons and the retraining of older surgeons. The logistics of this training will be complicated by 'turf battles' between plastic surgeons, general and breast surgeons. Questions regarding credentialing, training and medico-legal matters need to be addressed on international and national levels. There are varieties of opinions to designate the OP surgeons. There are

already specialized surgeons, with different degrees of experience and technical skills in breast surgery. They can be upgraded by short intensive courses on OPS. The benefits of training a skilled surgeon competent in all oncological and aesthetic procedures of the breast has many obvious advantages. This skilled surgeon might have a background in plastic or breast surgery with the additional training making him or her a surgeon with both competencies. This paradigm has already been taken in many European and other countries⁶.

International OPS Education and Training

Internationally, the need for increased OPS training and resources has been widely recognized. In 2007, the British Association of Surgical Oncology, in conjunction with the British Association of Plastic, Reconstructive and Aesthetic Surgeons and the Training Interface Group in Breast Surgery, produced a breast OPS guide to good practice. The guide established the importance of breast OPS and set forth mandates for essential skills in OPS, as well as a framework for education and training. Different countries like UK, France, Portugal, Italy, Germany, Spain, Australia and Newzeland have built up their own guidelines. Brazil is also well ahead of their training protocol. In different countries it is seen that after 3-5 years of their training in general surgery, 2-3 years in breast surgery and after that a supplemental training on plastic surgery is to be taken. Fellowship training on oncoplastic surgery is also prevailing in these countries. Breast surgical oncology training in the United States was formalized in 2003 through the joint efforts of the Society of Surgical Oncology, the American Society of Breast Disease, and the American Society of Breast Surgeons. Breast units are being accredited as formal training places in some selective centres⁷. East Anglia University of England is currently running a master's degree course on OPS. Many countries including India already established in their post graduate medical education breast as a separate subject including endocrine surgery.

Europe and American strategies

At the beginning there is some recommendation by leading OP surgeon in USA, which are still practised in many centers. Plastic surgeons are encouraged to focus on the upper and highest-level procedures while breast/general surgeons will learn lower-level procedures and some of upper-level procedures as

needed by their capacity. Opportunities to educate breast/general surgeons in these techniques will continue to increase over the next several years. Now it is told that formal education in oncoplastic surgery during breast fellowships is necessary to catch up with the rest of the surgical world⁸. The proposed global curriculum developed by the American Society of Surgical Oncology (SSO) and the European Society of Surgical Oncology (ESSO) provides a state of the art of breast cancer surgery, complements the syllabus and curriculum of the European Board of Surgery Qualification in Breast Surgery (EBSQ in BS) administered by ESSO.

ESSO fellowships: for instance ESSO members are being offered the opportunity by the Brazilian Society of Surgical Oncology (BSSO) to apply for a visiting observer ship in Brazil; ESSO fellowship in Breast Surgery-: the fellowship provides further specialized training in the multi-modality clinical care specific to the breast cancer patient and a deeper training in breast cancer research and training to allow young surgeons to visit a specialist breast unit in Europe, to help them to expand their experience and learn new techniques. Congress fellowships- for each ESSO congress the ESSO Scientific Committee awards a number of fellowship grants to participants from low-income countries to attend the congress. The need for certified breast units: Standardized techniques by specialist breast surgeons across Europe should be the aim. Uniformity is taken across Europe in their education and training system even in their job opportunities also⁹.

Bangladesh picture

Locally advanced breast cancer is still prevailing in higher numbers in Bangladesh. Low literacy rate, lack of surgeons' training, inadequate hospital logistics and shortness in radiation facilities throughout the country is compelling majority of breast cancer patients to undergo mastectomy. Conservation surgery is practised in the last decade by some surgeons at individual level. Unpublished data shows that 5-7% of the cases are managed by BCS. There is no specialized breast unit. As a result specialized breast surgeon is yet to develop. In addition, other supporting services like radiological facilities needs extra advancement. Oncoplastic surgery has started its journey for the last 2/3 years also in a very individual level. But the country with a huge population and patients deserves upgradation of a generation

of breast surgeons. Very recently Bangladesh school of oncoplastic surgery under the umbrella of Bangladesh cancer society started two years certification course on advanced breast cancer surgery focusing the OPS. But it needs acknowledgment by government machineries also. In near future every patient in Bangladesh could be offered their breast preservation maintaining the proper aesthesis and oncological outcome by specialist breast surgeons.

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